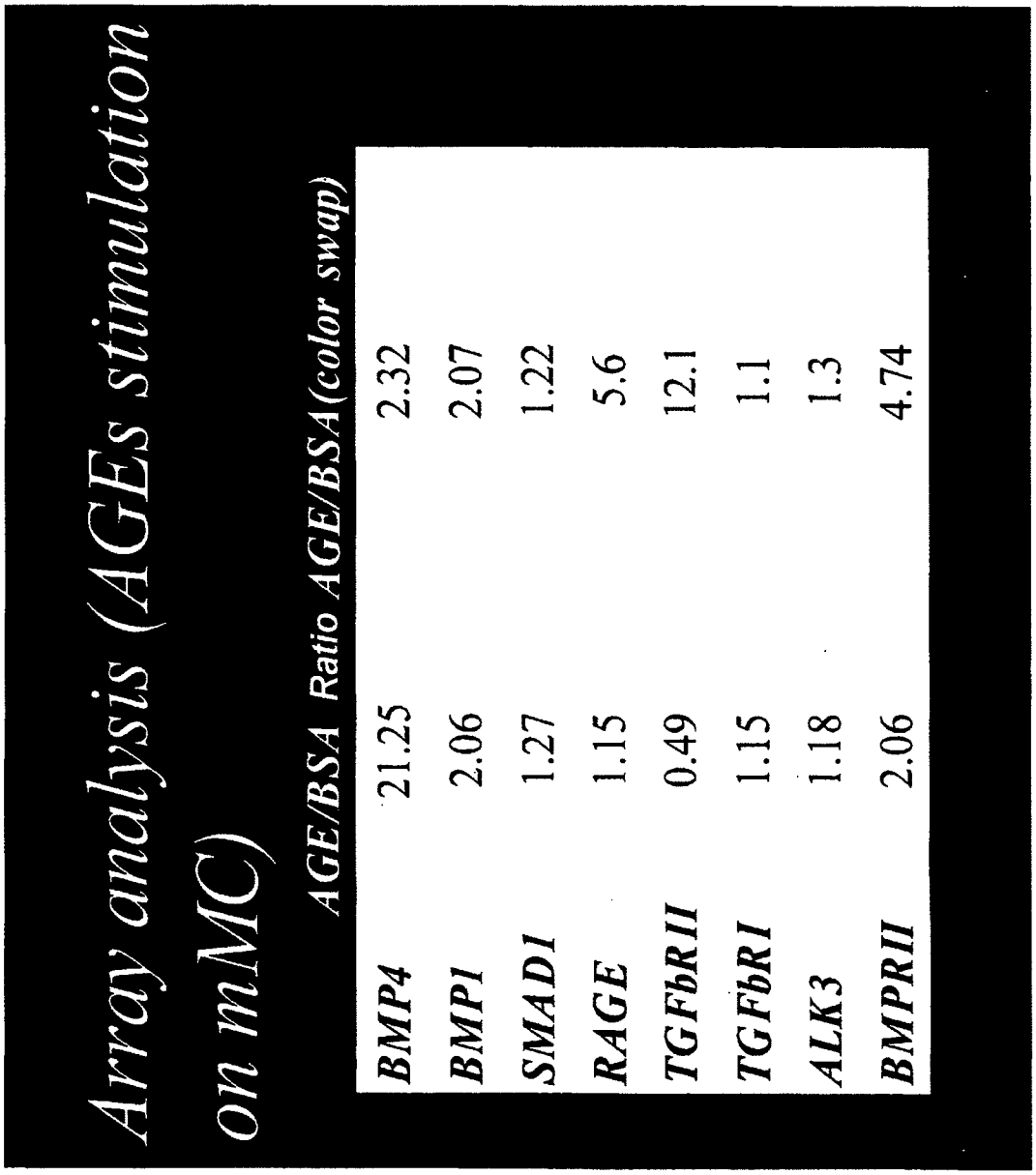
Fig. 5


Array analysis (AGEs stimulation on mMC)
AGE/BSA Ratio AGE/BSA(color swap)
BMP4 21.25 2.32
BMP1 2.06 2.07
SMAD1 1.27 1.22
RAGE 1.15 5.6
TGFbRII 0.49 12.1
TGFbRI 1.15 1.1
ALK3 1.18 1.3
BMPRII 2.06 4.74

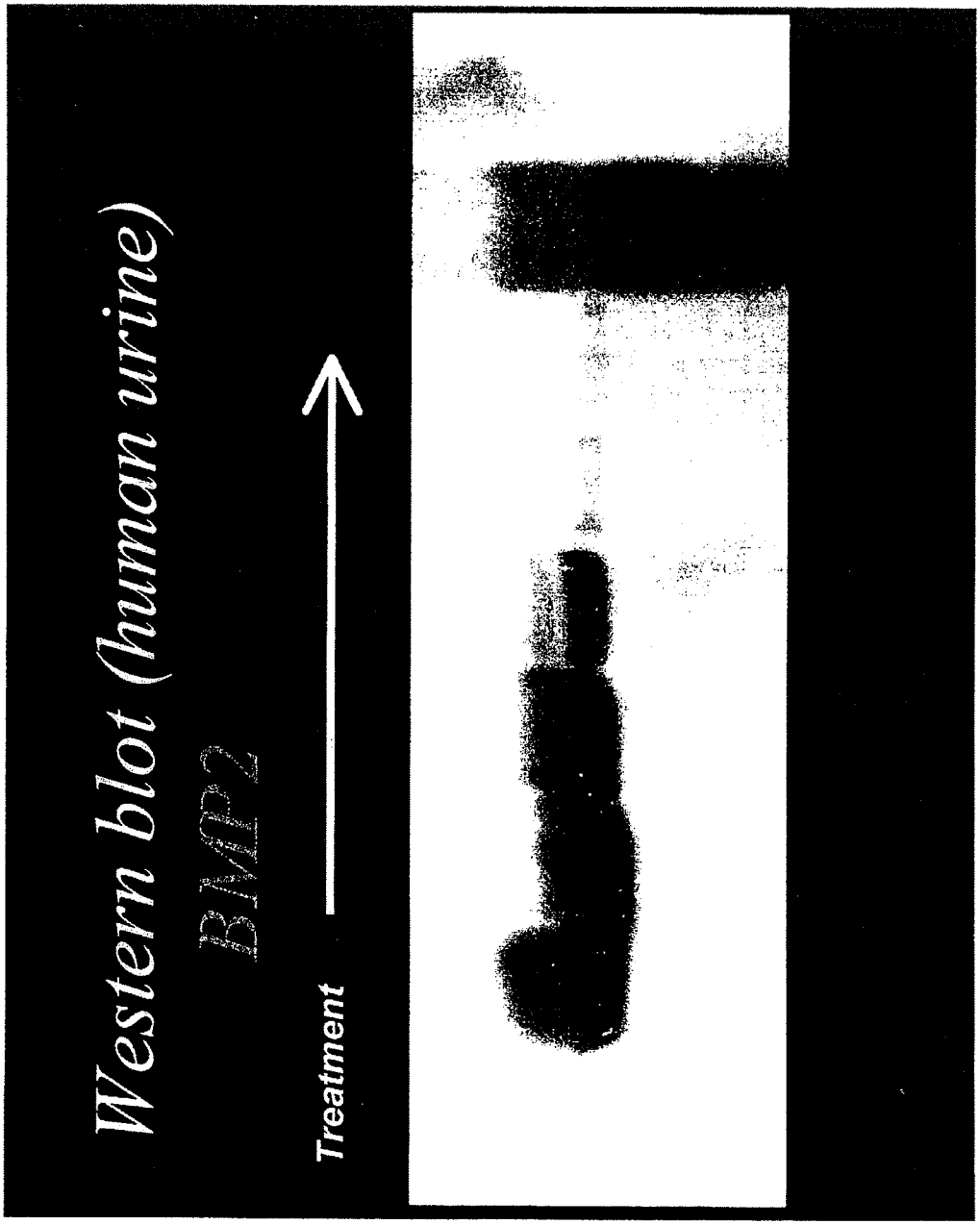


Fig. 6

Fig. 8

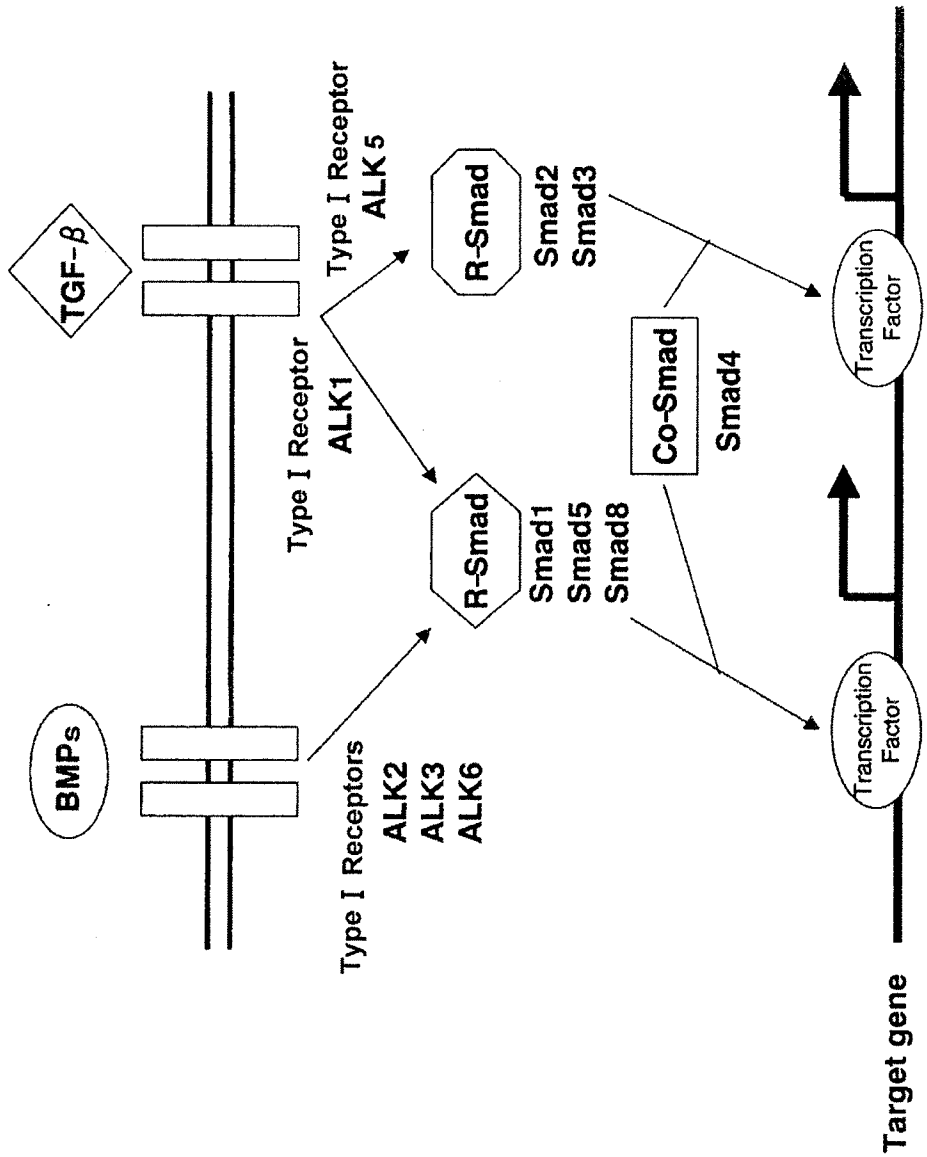

TGF-β
BMPs
Type I Receptor
ALK 5
Type I Receptor
ALK1
Type I Receptors
ALK2
ALK3
ALK6
R-Smad
Smad2
Smad3
R-Smad
Smad1
Smad5
Smad8
Co-Smad
Smad4
Transcription Factor
Transcription Factor
Target gene

Fig. 16

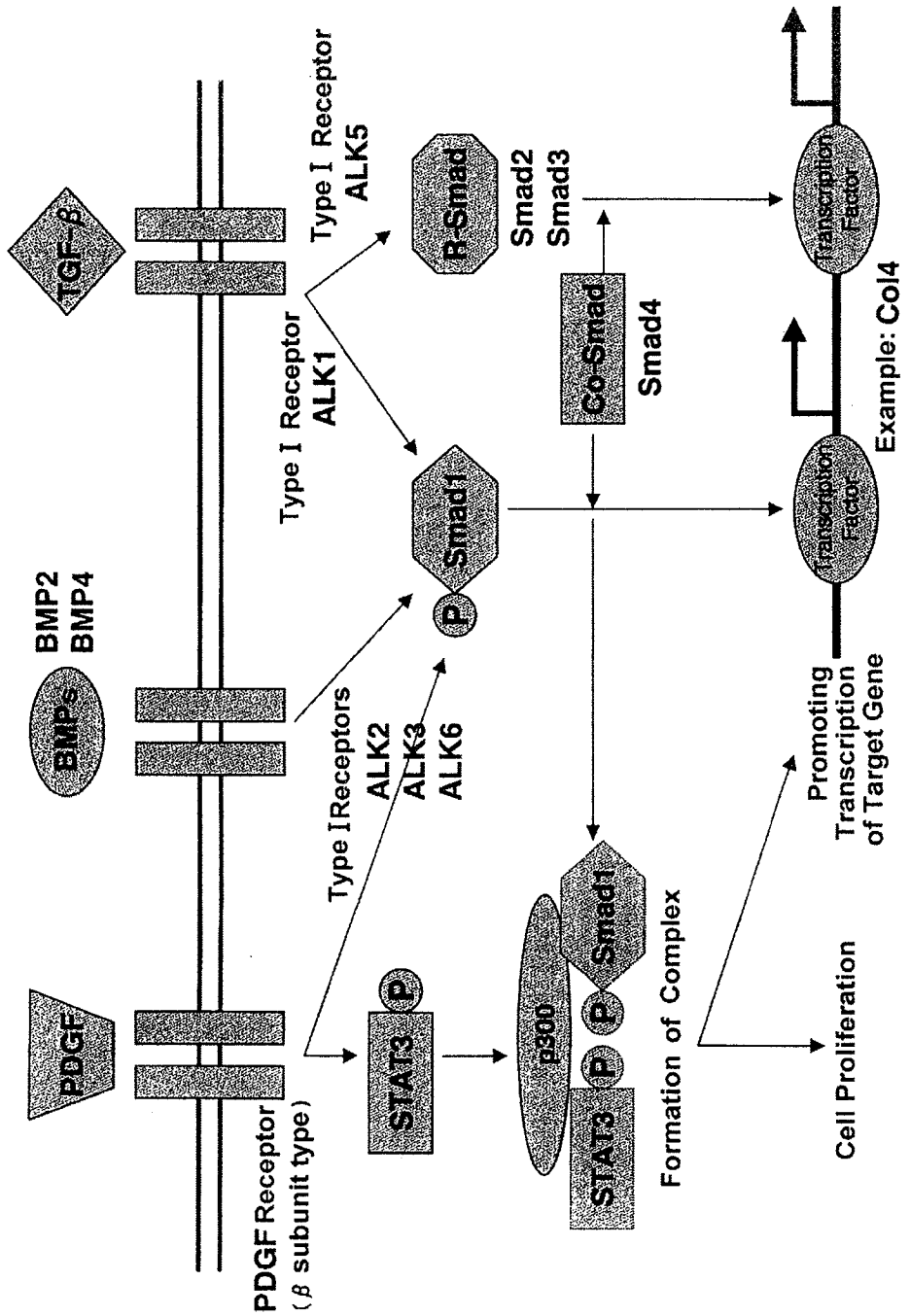
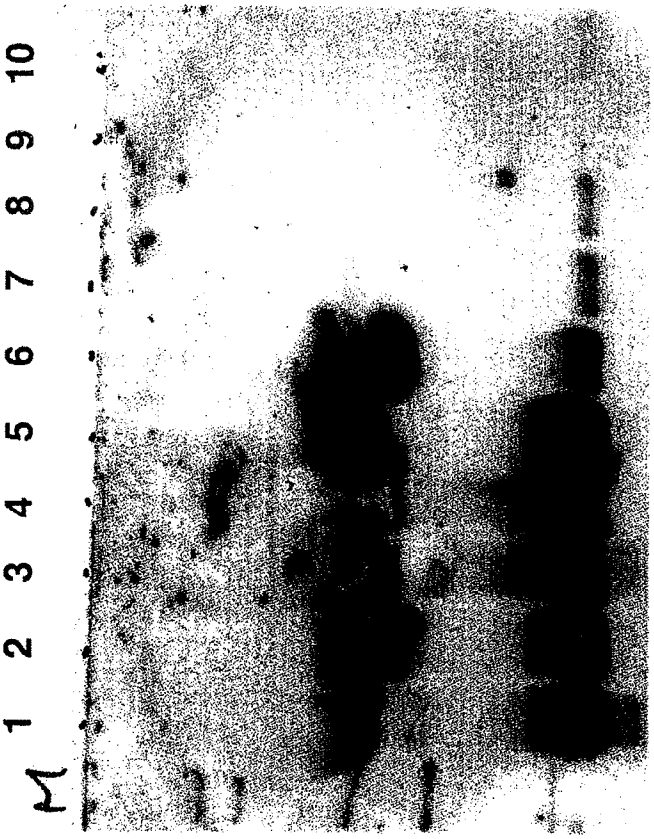

TGF-β
BMPs
BMP2
BMP4
PDGF
PDGF Receptor
(β subunit type)
Type I Receptor
ALK5
Type I Receptor
ALK1
Type IReceptors
ALK2
ALK3
ALK6
R-Smad
Smad2
Smad3
Co-Smad
Smad4
Smad1
P
STAT3
P
p300
Smad1
P
P
STAT3
Formation of Complex
Transcription Factor
Transcription Factor
Example: Col4
Promoting Transcription of Target Gene
Cell Proliferation

Fig. 17

Western blot (human urine ALK-1)



Lanes 1-5: diabetic nephropathy
Lane 6: mitochondrial disease in which diabetes is complicated with sclerosing, renal proliferative disease
Lanes 7-8: diabetes + nephritis (without sclerosis)
Lanes 9-1: normal

Fig. 18

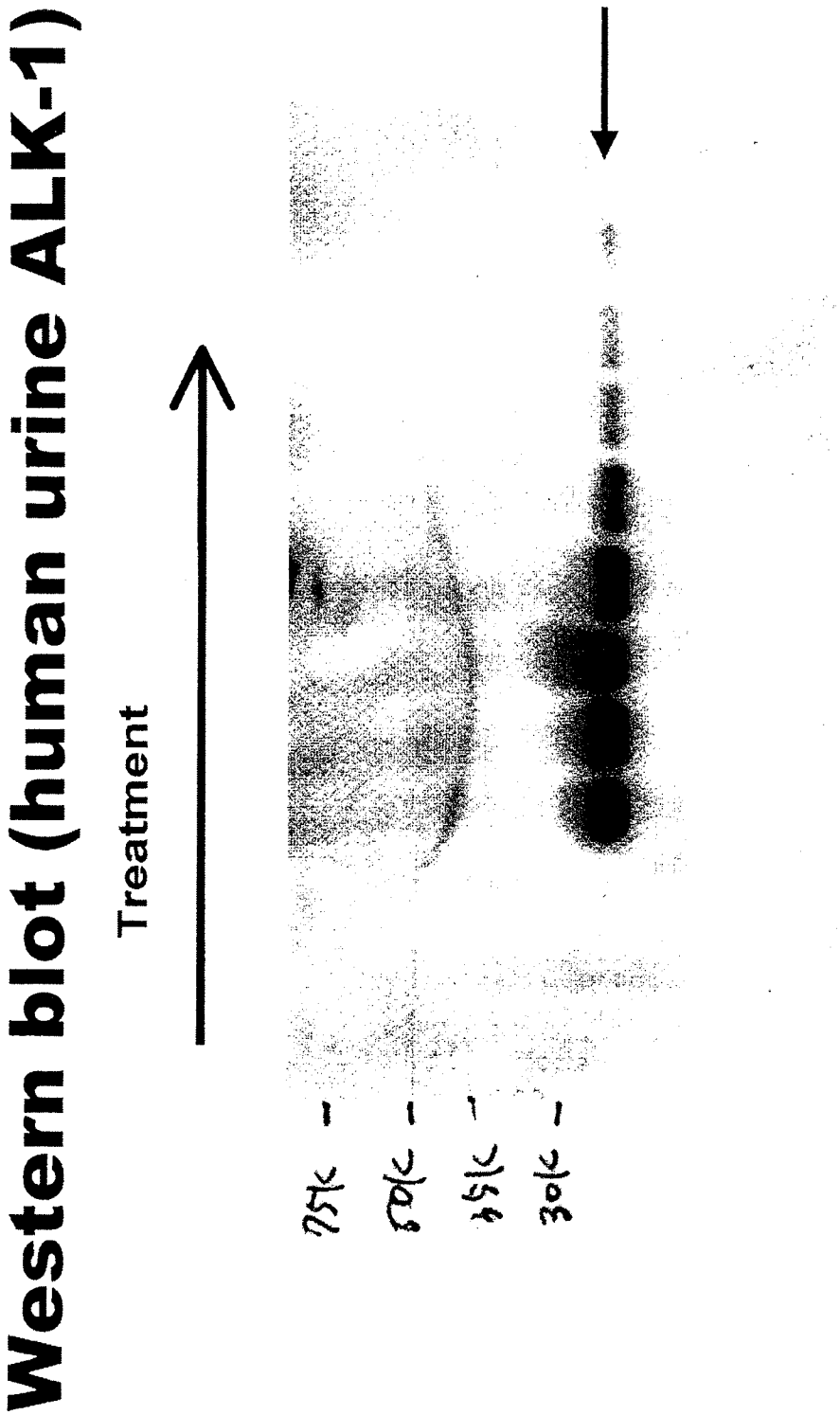
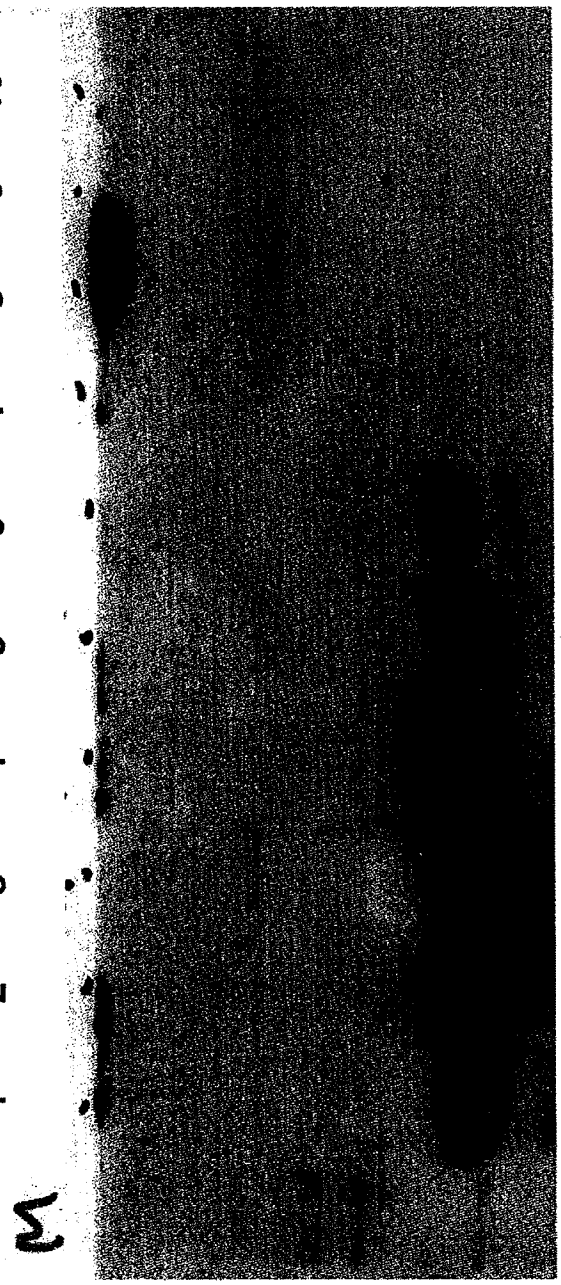


Fig. 19

Western blot (human urine Smad1)



Lanes 1-5: diabetic nephropathy
Lane 6: mitochondrial disease in which diabetes is complicated with sclerosing, renal proliferative disease
Lanes 7-8: diabetes + nephritis (without sclerosis)
Lanes 9-1: normal